Mobile Integrated Health-Community Paramedicine Panel Discussion

Michael Van Niewaal – MercyOne Ambulance

Rebecca Curtiss, ISPH BETS

Linda Frederiksen – MEDIC EMS

Terry Evans – Fort Dodge Fire/Rescue

Bob Welte, Siouxland Paramedics/Danbury Community Ambulance

Mercy Ambulance & Immanuel Pathways Partnership In Healthcare

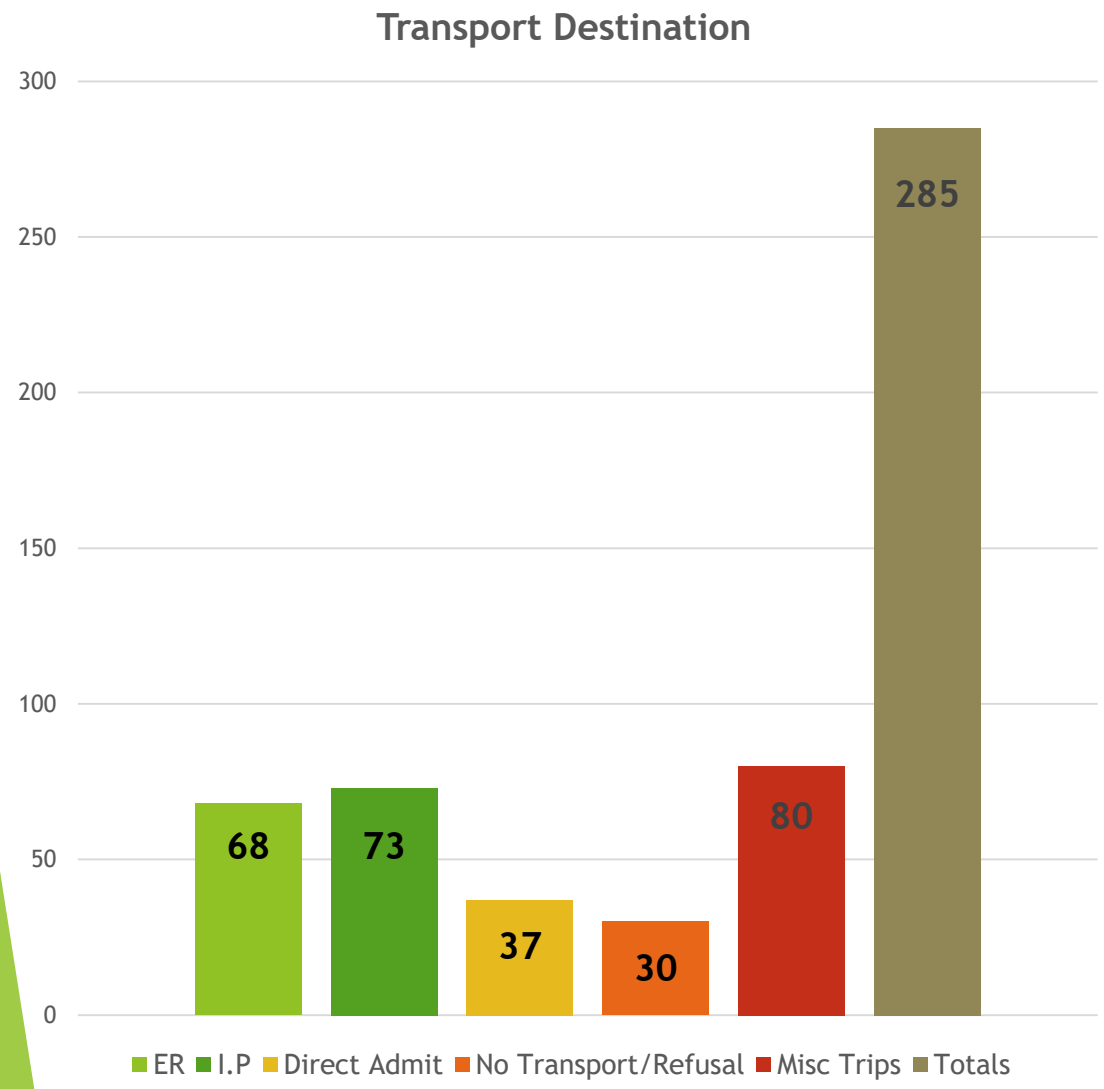
Program GOAL

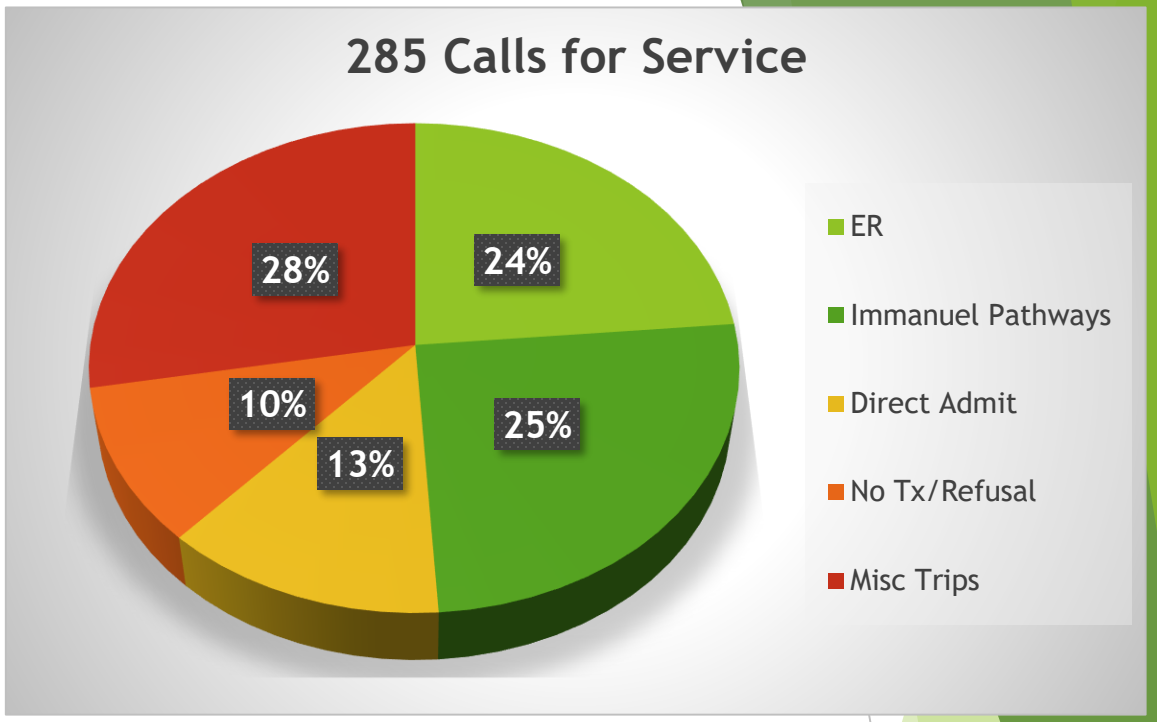
- Provide a service to Central Iowans in the nine-county area around Des Moines to ensure access to health care services.
- Provide a complete range of health and wellness care to individuals while living at home.
- Provide in-home medical assessment.
- Provide onsite medical counseling with primary care & treatment.
- Provide an efficient healthcare system that reduces overcrowding of the health care system.
- Reduce emergency room visits.

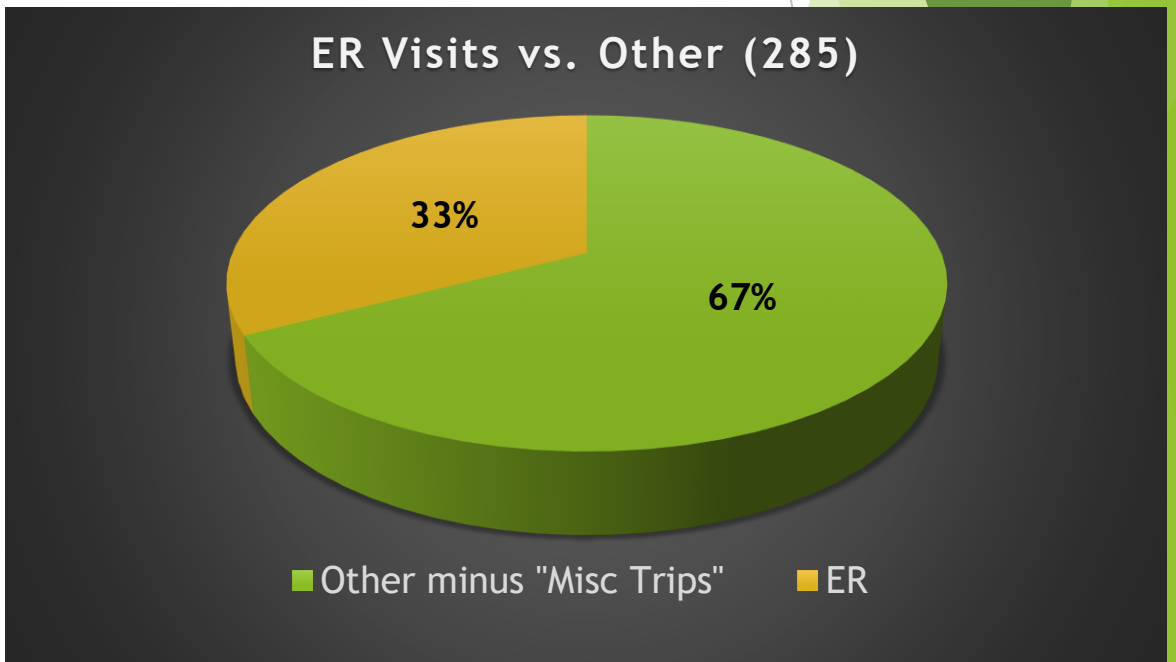
Service Provided

- Assessment & Treatment under Scope of Practice
- Ancillary Services – collection of blood & urine for testing at Mercy Laboratory
- Medication Assistance – Daily medications
- On-Line Medical Direction
- Fall Assistance – “I’ve fallen and can’t get up”
- Emergent & Non-Emergent transports.
  - Non-Emergent Transports are defined as return trips from Immanuel Pathways Clinic, Discharges from Hospital, Specialty Clinics etc.

By the NUMBERS







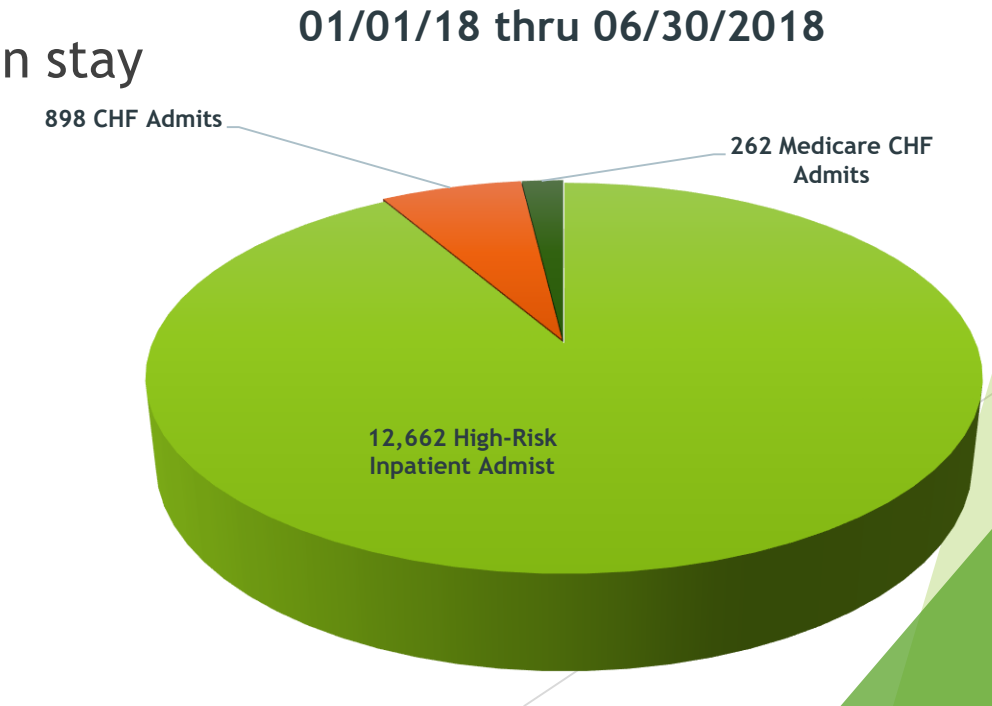
MercyOne Community Paramedicine

MercyOne Medical Center desires to assist patient with self-management interventions that will allow the patient to remain in their home and avoid emergency or hospital admission.

MercyOne Community Paramedicine

History

- MercyOne Medical Center recognizes our higher than expected readmission rate for CHF patients.
- Recognized the need for a reliable home visit that can be provided same day or with in a 24 hour period based on patient needs……
  - ✓ Could reduce ER discharge time
  - ✓ Could reduce hospital admission stay
  - ✓ Could reduce ER re-visits

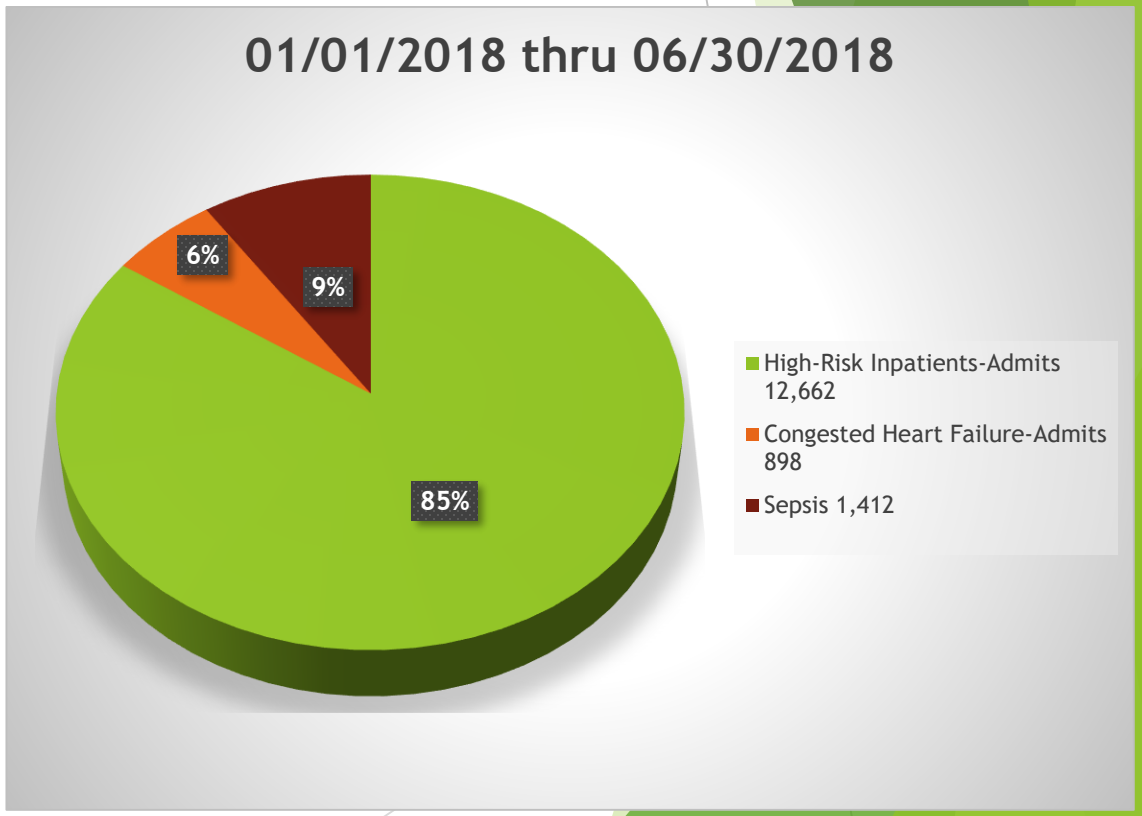


Program Metrics

- November 2018 initiated a program review
- Identified Medicare, hospital inpatient, emergency room or Iowa Heart CHF Clinic patients.
- Provide care coordination hand-off to Mercy Home Care services and/or Primary Care Physician.
- Assess and address SDoH (Social Determinants of Health)
- Program implementation July 29th 2019
- Cost avoidance of readmission

Where are we NOW…….. Where are we GOING?

- Focal Point is on our “Advanced CHF Patients”
- Referral sources
  - Iowa Heart
  - MercyOne Hospital
- Enrollment numbers
  - Program total to date – 38
  - Graduated the program – 2
  - Denied the program – 2
- Daily Home Visits
- Sepsis
  - ✓ Knee & Hip
  - ✓ Wound Care
- Collaboration with SNF
- Cost Avoidance –
  - $7,487.00 per day for a CHF inpatient stay.



MERCYONE

Des Moines Ambulance Service
1971 4th St, Ste. #520
West Des Moines, IA 50265

T: 515-327-7513
F: 515-226-7952

DISCHARGE REFERRAL FOR COMMUNITY PARAMEDICINE HOME VISIT

Patient Name: _____ DOB: _____

Discharge Address: _____

Patient Phone Number: _____ Chronic Disease Diagnosis: _____

Reason for Referral: _____

_____

Name/Phone # of Person Referring: _____

Next Physician Appointment/Location: _____

Recent Vitals: BP _____ HR _____ RR _____ O2 Sat _____

Is patient on home oxygen? If yes, LPM? _____

Goal Weight _____ Admit Weight _____ Hospital Discharge Weight _____

Echo EF _____ # of Hosp Admissions/ED Visits in the last 12 Months _____

Discharge Goals _____

_____

Barriers to Care _____

Discharge Physician Orders for Community Paramedic _____

_____

_____

Any questions or concerns, please contact: Community Paramedic Coordinator Stevi Breitman.

sbreitman@mercydesmoines.org

***Please attach Community Paramedic Consent Form.**

Fort Dodge Fire/Rescue MIH-CP

Terry Evans

History

- Formerly Trinity Regional medical Center MIH-CP
- TRMC shut down the EMS dept. in July 2018
  - Process of resurrecting the MIH-CP program to be similar to TRMC MIH-CP

HOW DID OUR C.P. PROGRAM DEVELOP?

- ANALYSIS OF COUNTY HEALTH NEEDS
  - County Health Rankings.com
  - Community Health Needs Assessment
- JOB SHADOWING LOCAL RESOURCES
  - Palliative care, Public Health
- JOB SHADOWING HENNEPIN COUNTY EMS COMMUNITY PARAMEDICINE
- DIDACTIC INSTRUCTION THROUGH HENNEPIN TECH COMMUNITY COLLEGE

WHO IS REFERRED?

- The C.P. program accepts referrals on any patient that has been seen in the ER brought by ambulance, refused 911 transport, or referred by a local medical provider
- There is no restriction on referrals-our ER Navigator will research each referral to see:
  - Does the pt. have home care already? If they do the ER Navigator will contact the home care agency and see if they can go visit the patient
  - The CP program does not replace homecare; in fact we increase referrals to the home care agencies
  - We look for what community resources we can refer patient's to so they can keep healthy and happy in their home.
  - Does the patient have a primary care provider??

Community Paramedicine

AUTHORS: Mary Kruse RN, EMT-P, Terry Evans EMT-PS

What is *Community Paramedicine?*

A nationally emerging initiative to utilize on duty paramedics to perform in home visits on patients that lack resources to stay healthy in their home.

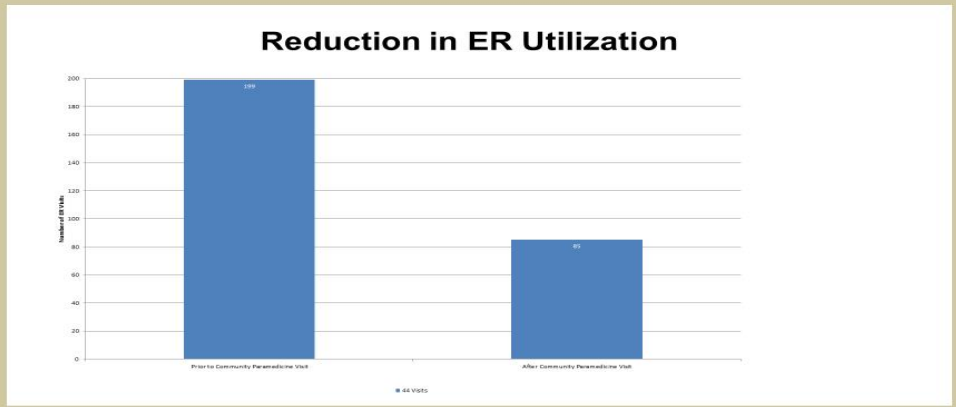
Method:

- Emergency Room (ER) staff refer high risk patients to the ER Patient Navigator.
- Trained paramedic crew makes a one time free home visit.
- Patient needs identified based on home environment.
- Address immediate barriers to health and well being of patient.
- Referral to appropriate health/community agencies.

Benefits:

- Utilization of on duty hospital based paramedics with expertise and patient rapport skills.
- No additional health care cost.
- Increased referrals to outside entities.
- Immediately deployable work force.
- Decreased use of Emergency Services
- Keeping patients healthy and in their own home.
- Increased staff satisfaction.

WE CARE FOR OUR COMMUNITY



Case Study:

30 y/o male patient with significant seizure history that frequently utilizes Emergency Services.

- One home visit: 24 minutes.
- Barriers found:
  - Outdated medications
  - Lack of Primary Care Provider (PCP) identification
  - Lacking medication management/education
  - Lack of basic home necessities
- Outcomes:
  - PCP identified and appointment made for same day.
  - Referral to Public Health agency for overall health care maintenance.
  - Offered reassurance that someone cared.
  - Dramatic decrease of Emergency Services usage.
  - Cost savings estimated to be: $7200.

References:

Eagle County Colorado Community Paramedicine Handbook

Hennipin County Minnesota Community Paramedicine Program.

What our future holds

- While in the process of education there will be an increased emphasis of social determinant recognition
- There appears to be an already large emphasis in mental health for our community
- Our relationship with WCPH is amazing and foresee expanded regions of influence with our program
- Because of the transition this program has a large renovation in processes that were already in place.

Iowa Data

- Do we have a need for MIH/CP in Iowa?
- In calendar year 2018, a total of 15,644 patients were transports 3 times n 30 days
- This is significant!
  - Scott County-2,817
  - Polk County 1,433
  - Johnson County 1,161
  - Dubuque County 800

Other Success Stories

Fort Worth, Texas

How MedStar Saved $25 Million by Avoiding Unnecessary Emergency Services

10/31/2019 | *by Will Maddox* | Share Post

These days, every aspect of the medical industry is looking to find cost savings, and 9-1-1 service is part of that movement as well. MedStar Mobile Healthcare, a North Texas organization that provides emergency services, has avoided over $25 million in medical costs for residents and payers over the past seven years.

The emergency department is one of the most expensive pieces of the medical industry, especially when it is full of problems that don't belong in an emergency room. And when emergency physicians are operating out-of-network at in-network hospitals, surprise

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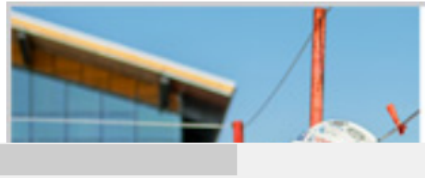

Mobile Healthcare Programs - Overview

As the EMS provider for more than 1 million people in the greater Fort Worth area, MedStar sees the use of the 9-1-1 system for medical and trauma conditions that, for the patient's benefit, could best be addressed by a response other than an ambulance trip to an emergency department. In 2008, 21 individual patients were transported to area emergency rooms more than 2,000 times by MedStar, resulting in $962,429 in ambulance charges (not including the charges from the hospital emergency departments). Majority of these bills are uncollected. Many people are using EMS as a health care safety net.

In July 2009, MedStar implemented the Mobile Integrated Healthcare Program that identified high system users and developed individual care plans for each of those patients.

As part of that care plan, the enrolled patient receives regularly scheduled home visits by one of our Mobile Healthcare Providers. During those home visits, the paramedic provides a medical assessment, ensures the patient is taking their prescribed medications and is following up with their primary care provider. They also provide some often much-needed social interaction for these patients.

That humble beginning has led to the development and implementation of several programs all centered on ***Patient Navigation*** and ***Mobile Integrated Healthcare***:

9-1-1 Nurse Triage - Low acuity 9-1-1 callers are referred to a specially trained RN in our Call Center who helps the patient find

Mobile Integrated Healthcare:

9-1-1 Nurse Triage - Low acuity 9-1-1 callers are referred to a specially trained RN in our Call Center who helps the patient find appropriate resources for their medical issue. **Since June 2012, 12,226 low-acuity 9-1-1 callers have been referred to this program, and 37.6% of these patients have had a response other than an ambulance to the emergency department. *This reduction has saved $6 million in healthcare expenditures for ambulance transport and emergency department expenditures ($1,298 per enrolled patient).***

High Utilizer Group ("EMS Loyalty") Program - Patients who use 9-1-1 15 or more times in 90 days, or who are referred into the program by ED case managers due to high ED utilization, are enrolled. MedStar's Mobile Healthcare Providers (MHPs) conduct regular home visits, connect the patients to available resources and teach the patients how to better manage their own healthcare. Typical enrollment is 30-90 days. **Since July 2009, 779 patients with 2 years of utilization data available (*1 year pre and 1 year post enrollment*) have reduced ambulance transports to the emergency department by 5,909 (49%) and 70% for patients designated as "System Abusers". It also has reduced ED visits in this patient population by 3,496 and prevented 1,596 hospital admissions. This reduction has saved $23 million in healthcare expenditures for ambulance, ED and admissions ($29,481 per enrolled patient).**

Readmission Avoidance - Patients at risk for a 30-day readmission are referred to MedStar by the patient's Case Manager or PCP. MedStar conducts a series of home visits to educate the patient and family on appropriate care management and loops the patient to their PCP. If the patient needs intervention, the MedStar MHP may coordinate in-home diuresis or other treatments with the patient's PCP, along with a follow-up PCP appointment. **Since October 2013, 348 patients who had a prior 30-day readmission AND the referring agency felt would have a 30-day readmission have been referred into the program. Of those, only 169 had a 30-day readmission, a 52.5% reduction in readmissions for this high-risk readmission cohort.**

Hospice Revocation Avoidance - Patients/families at risk for revoking hospice status by calling 9-1-1 for an urgent trip to the ED are identified by the Hospice agency. MedStar and the Hospice agency coordinate efforts to reduce the possibility of the patient/family revoking hospice status. **Through September 2019, 565 patients who the hospice agency felt would disenroll from hospice were enrolled in the program. Only 102 (19.3%) had a disenrollment.**

Contents lists available at ScienceDirect

American Journal of Emergency Medicine

journal homepage: www.elsevier.com/locate/ajem

Brief Report

A pilot mobile integrated healthcare program for frequent utilizers of emergency department services

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ABSTRACT

Purpose: To examine whether or not a mobile integrated health (MIH) program may improve health-related quality of life while reducing emergency department (ED) transports, ED admissions, and inpatient hospital admissions in frequent utilizers of ED services.
Methods: A small retrospective evaluation assessing pre- and post-program quality of life, ED transports, ED admissions, and inpatient hospital admissions was conducted in patients who frequently used the ED for non-emergent or emergent/primary care treatable conditions.
Results: Pre- and post-program data available on 64 program completers are reported. Of those with mobility problems (n = 42), 38% improved; those with problems performing usual activities (N = 45), 58% reported improvement; and of those experiencing moderate to extreme pain or discomfort (N = 48), 42% reported no pain or discomfort after program completion. Frequency of ED transports decreased (5.34 ± 6.0 vs. 2.08 ± 3.3; $p < 0.000$), as did ED admissions (9.66 ± 10.2 *vs.* 3.30 ± 4.6; $p < 0.000$), and inpatient hospital admissions (3.11 ± 5.5 *vs.* 1.38 ± 2.5; $p = 0.003$).
Conclusion: Results suggest that MIH participation is associated with improved quality of life, reduced ED transports, ED admissions, and inpatient hospital admissions. The MIH program may have potential to improve health outcomes in patients who are frequent ED users for non-emergent or emergent/primary care treatable conditions by teaching them how to proactively manage their health and adhere to therapeutic regimens. Programmatic reasons for these improvements may include psychosocial bonding with participants who received in-home care, health coaching, and the MIH team's 24/7 availability that provided immediate healthcare access.

Another Iowa Program

Siouxland Paramedics

Bob Welte

Siouxland Community Paramedicine Timeline

Initial Meeting

Start with ER

Research

Fort Dodge

Legal Aspects

Continuity of Care

Data Tracking

Pilot Launch

Bi-Weekly Care Team Review

July ‘18

August ‘18

September ‘18

October ‘18

November ‘18

December ‘18

January ‘19

February ‘19

The Initial Meeting

- Health Inc. - Joint Venture
  - MercyOne, Siouxland, Unity Point, Hospice
  - Both facilities experience re-admissions and frequent visits through the Emergency Department
  - Think radically different
- Let’s Start with Emergency Department

Why Community Paramedicine?

- Patients Need More Support
  - Understanding Discharge Instructions
  - Medication Changes
  - Social Support Systems
- Complexity of Care is Increasing
- Need to Try Something Different
- It’s the Right Thing to Do

Our Goal

- Aid in the efforts to decrease unnecessary visits to the emergency room
- Aid in the efforts to decrease hospital readmission rates
- Identify gaps in care
- Connect patients with appropriate resources
- Ensure patients have support systems in place other than the ED

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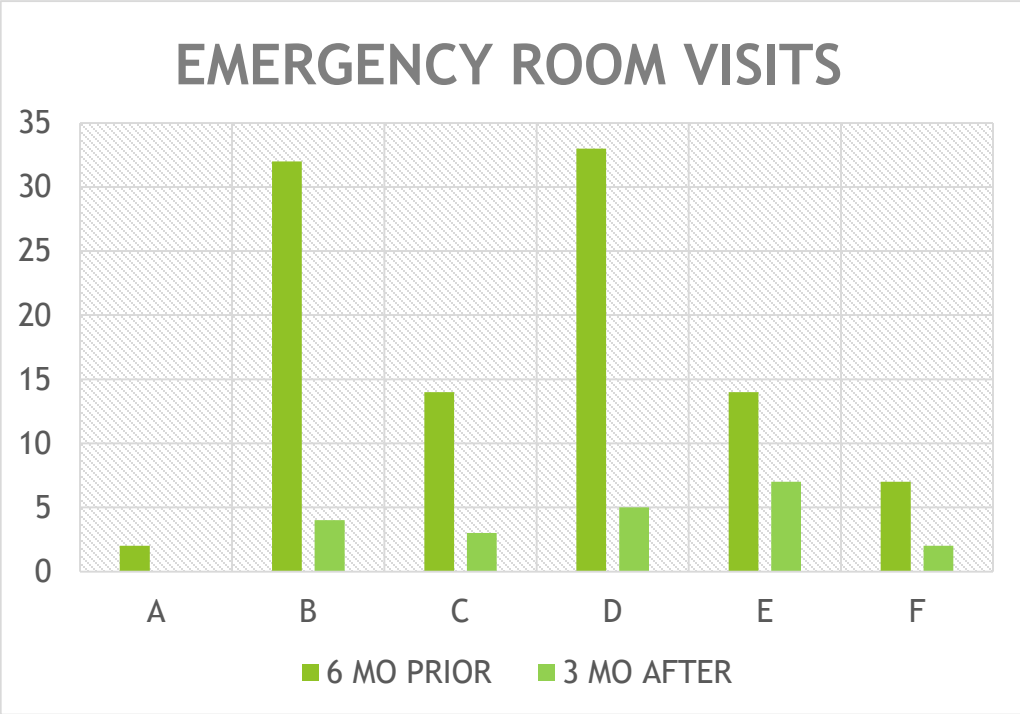
Pilot Launch

- The Team
  - MercyOne Siouxland, Unity Point, Hospice, PACE, Siouxland Mental Health, Health Inc., Siouxland Community Health, Home Health
  - Social Workers, Nurses, Case Managers, Paramedics, Physicians
- Top 20 “super users” from MercyOne Siouxland and Unity Point
  - Many of the same names
  - Pick 6
  - Survey the needs/wants of the identified patients
- Start SLOW
  - What can we learn from the 6 pilot patients

Services Provided
Home Visits, Phone Calls, Facility Visits…

- Health Assessments
  - Vital signs
  - EKGs
  - Blood glucose levels
  - General triage
- Chronic Disease Management
  - Frequently seen diagnoses: CHF, diabetes, COPD, pneumonia, mental health (anxiety)
  - Education reinforcement
- Medication Compliance
  - Set up medications
  - Help with medication list
  - Help to coordinate and ensure on the correct medications
- Hospital Discharge Follow Up
  - Discharge instruction questions/follow up
  - Check up
  - Update medications records
  - General questions/triage

Pilot Data


EMERGENCY ROOM VISITS
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0
A
B
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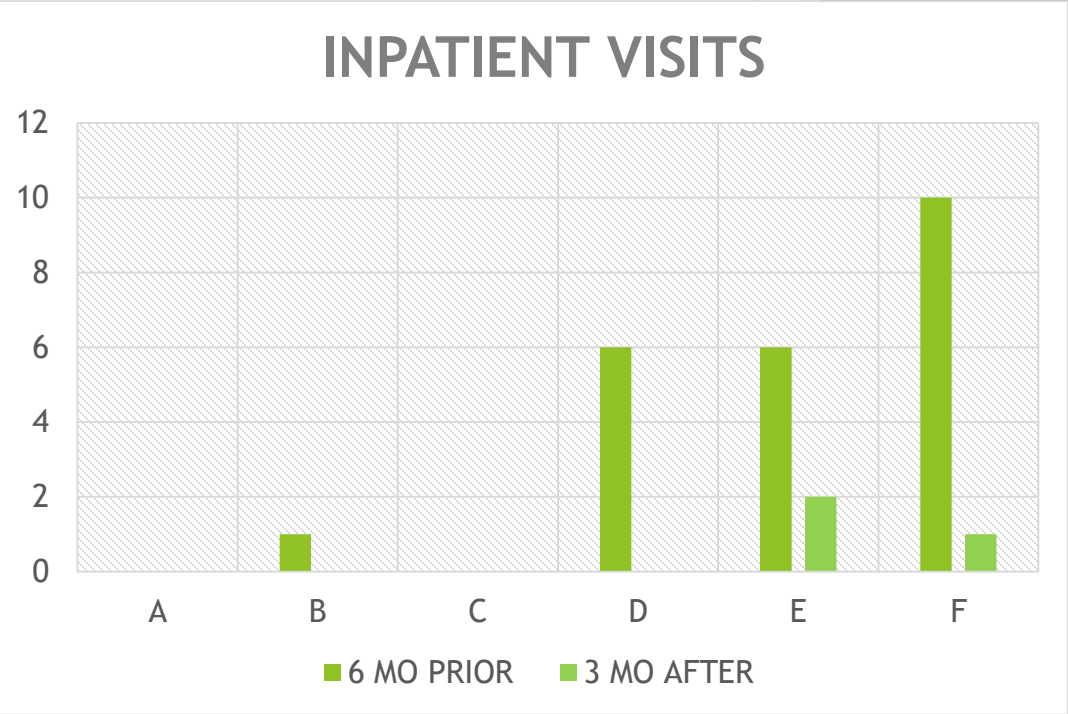
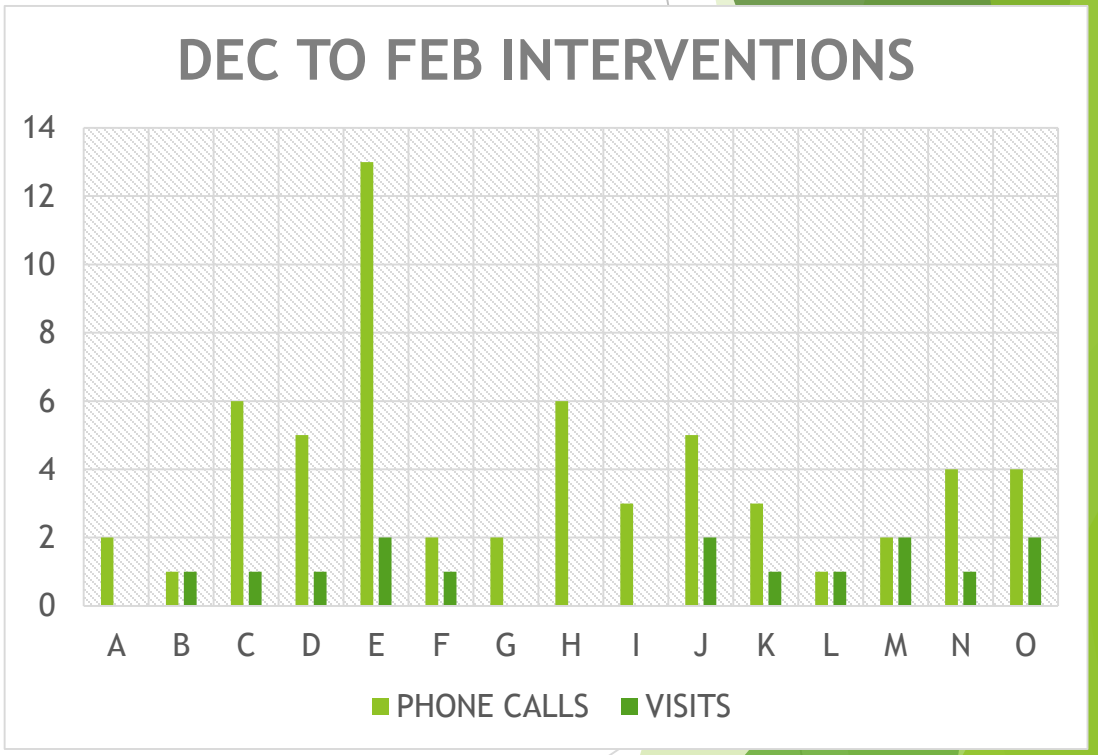
6 MO PRIOR
3 MO AFTER


INPATIENT VISITS
12
10
8
6
4
2
0
A
B
C
D
E
F
6 MO PRIOR
3 MO AFTER

Current State

- Team meets every other week
- Manage incoming referrals
- Review patients and status
- Discussions for improvement
  - Transportation
  - Involving PCP
  - ESO-EMR
  - Communication with healthcare team

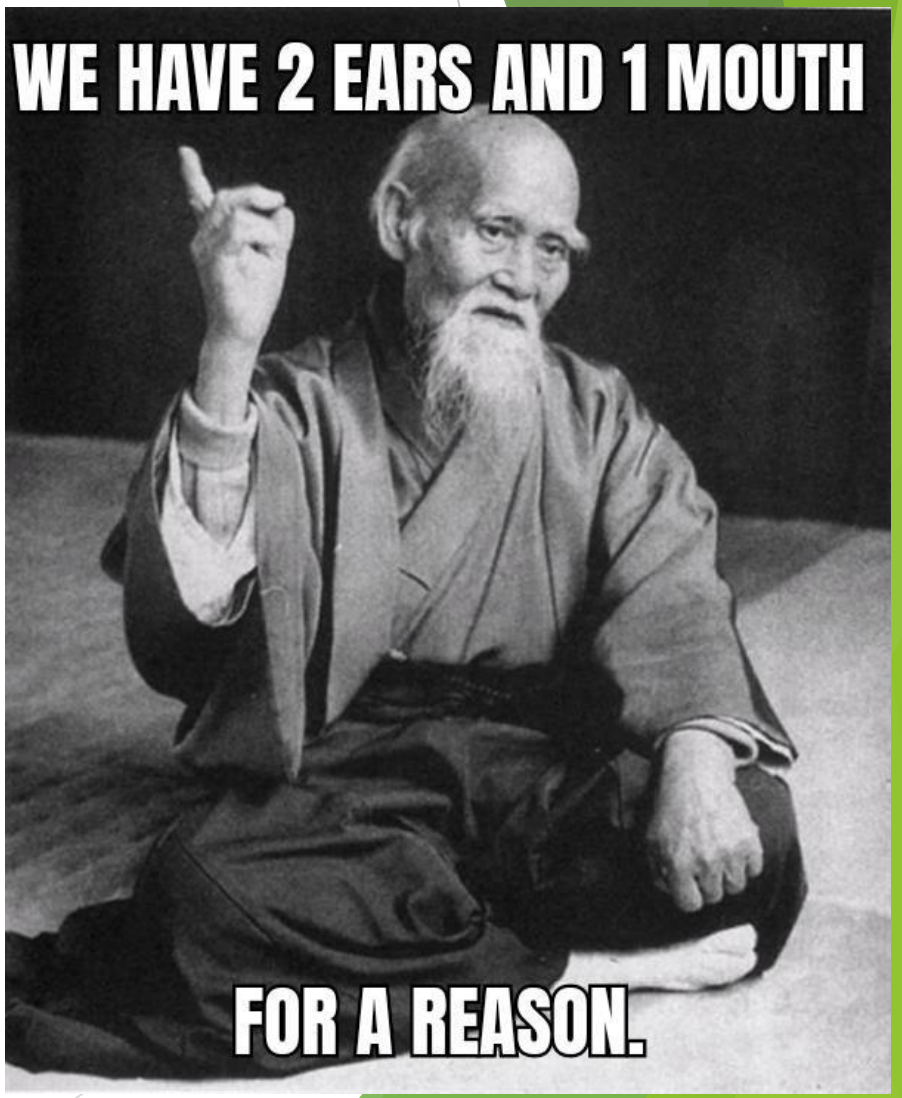


59 PHONE CALLS
15 VISITS

Lessons Learned

- It truly is a community effort!
- Most patients just need social support
- It isn't one size fits all
- Be ready to listen
- So many resources out there

- Community Needs
  - Transportation
  - Mental Health
  - Alcohol & Addiction



Programs In Iowa

- IDPH toolkit
- State Level Sub-committee
- Mercy Des Moines
- Fort Dodge
- Google is your friend
- Come to one of our meetings to learn more!

Panel Discussion

Questions Welcome!